



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,319	08/28/2001	James J. Alwan	AIRFIBE.004A	6272
35690	7590	11/30/2005	EXAMINER	
		MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.	TRAN, DZUNG D	
		P.O. BOX 398	ART UNIT	PAPER NUMBER
		AUSTIN, TX 78767-0398		2638

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/941,319	ALWAN ET AL.	
	Examiner	Art Unit	
	Dzung D Tran	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 August 2001.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-34,37-48,51-60,62-71 and 74-76 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1-18 is/are allowed.
 6) Claim(s) 19-34,37-48,51-60,62-71 and 74-76 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. The indicated allowability of claims 19-34, 37-48, 51-60, 61-71 and 74-76 are withdrawn in view of the newly rejection.

Specification

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19-34, 37-48, 51-60, 61-71 and 74-76 rejected under 35 U.S.C. 103(a) as being unpatentable over Cato US patent no. 5,229,593.

Regarding claims 19, 41, 68 and 74, Cato discloses in figure 1, a method/apparatus of a communication system comprising:

a first node (e.g. communication terminal A) having a transmitter 12 and a receiver 13 (inherently is a first transceiver) configured to transmit a first beam 15 at a first power level and configured to receive a second beam 15';

a second node (e.g. communication terminal B) having a transmitter 12' and a receiver 13' (inherently is a second transceiver) configured to transmit the second beam 15' at a second power level to the first transceiver and configured to receive the first beam 15 transmitted by the first transceiver;

a microprocessor 11 (same as claimed a first control module) configured to control the first transceiver to maintain a safe exposure level to a blocking object by

changing the first power level of the first beam based on the power level of the received second beam (col. 5, lines 25-26, col. 6, lines 50-60); and

a microprocessor 11' (same as claimed a second control module) configured to control the second transceiver to maintain the safe exposure to the blocking object by changing the second power level of the second beam based on the power level of the received first beam (col. 5, lines 25-26, col. 6, lines 50-60).

Wherein the first control module includes a processor 11 configured to change the first power level to an acquisition and recovery mode (Fig. 3, step 40, col. 7, lines 9-16).

Regarding claim 20, Cato discloses the second transceiver includes a transmitter 12' and a receiver 13'.

Regarding claim 21, Cato discloses the first transceiver includes a transmitter 12 and a receiver 13.

Regarding claim 22, Cato discloses communication electronic (14, 24, 26) configured coupled to the first control module 11 to the first transceiver.

Regarding claim 23, Cato discloses communication electronic (14', 24', 26') configured coupled to the second control module 11' to the second transceiver.

Regarding claim 24, Cato discloses the receiver includes an optical detector (e.g., photodiode, see col. 5, line 44).

Regarding claimd 25, 38-40 and 52-54, Cato discloses the receiver includes a processing circuit element (e.g., amplifier & threshold circuit 24) coupled to receiver

and configured to extract a data signal and received signal strength indicator from the second beam (col. 5, lines 44-55).

Regarding claims 26 and 75, Cato discloses the transmitter laser 12 (col. 6, line 7) that can be pulsing at a low duty cycle whenever the output laser beam 15 may be blocked or misaligned (col. 6, lines 6-10) (e.g., it is inherently that laser is switch to change the first beam power).

Regarding claims 27 and 76, Cato discloses the transmitter laser 12 (col. 6, line 7) configured to emit the first beam 15 and a driver circuit 14 coupled to both the laser 12 and the first control module 11.

Regarding claims 28 and 29, Cato discloses the processor 11, 11' is configured to change the first power level between modes (figure 2, steps 32, 40).

Regarding claim 30, Cato discloses the processor 11 is configured to change the first power level to normal operation mode (figure 2, step 40).

Regarding claim 31, Cato discloses the processor 11 is configured to change the first power level to a power reduction mode (figure 2, step 32).

Regarding claim 32, Cato discloses wherein the first and second beams maintain a safe exposure level to a blocking object (col. 6, lines 11-60).

Regarding claim 33, Cato discloses wherein the multiple modes includes radiation levels harmful to humans (e.g., high power level, see col. 4, lines 48-52).

Regarding claim 34, Cato discloses microprocessor 11, 11'.

Regarding claim 37, Cato discloses the processor 11 receive multiple signal from the transceiver (col. 4, line 63 to col. 5, line 24).

Regarding claim 42, Cato discloses the first control module varies the power level of the first beam when an object blocks the first beam to maintain the safe exposure level to the object (col. 6, lines 11-60).

Regarding claim 43, Cato discloses the power level include normal operation mode (figure 2, step 40).

Regarding claim 44, Cato discloses the power level includes power reduction mode (figure 2, step 32).

Regarding claim 46, Cato discloses wherein the multiple modes includes radiation levels harmful to humans (e.g., high power level, see col. 4, lines 48-52).

Regarding claim 47, Cato discloses the first and second transceivers each include a transmitter 12, 12' and a receiver 13, 13'.

Regarding claim 48, Cato discloses microprocessor 11, 11'.

Regarding claim 51, Cato discloses the processor 11, 11' receive multiple signal from the transceivers (col. 4, line 63 to col. 5, line 24).

Regarding claim 69, Cato discloses a receiver 13 for detecting the power level reduction in the first communication beam at the second transceiver and controller 11, 11' for send the control signal to the transmitter 12, 12' for reducing the power level.

Regarding claims 70 and 71, Cato discloses in step 32 of Figure 2, for pulsing the power of the first communication beam to limit the radiation exposure for a blocking object to a safe level and sending the confirmation during the first pulsing of the first communication beam to reestablish communication with the second optical transceiver and step for increasing the power level to the first communication beam (step 40)

4. Claims 1-18 are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran
Dzung Tran
11/28/2005